Dual Super Lead, All-Valve Amps with Reverb

Owner’s Manual
Jim Marshall

From JIM MARSHALL
I would like to personally thank and congratulate you for selecting one of our Dual Super Lead, all-valve DSL100H heads or DSL40C combos.

Since I started Marshall Amplification in 1962 I have witnessed some incredible breakthroughs and advances in amplifier design technology. These include, switchable channels, Master Volume, Reverb, MIDI technology, speaker emulation and digital effects processing, to name just a few. These may seem like every day features nowadays but this certainty wasn’t always the case.

However, the same values that were present in the first Marshalls are still here today, that is, solid workmanship, reliability, iconic looks and above all great Marshall tone.

As you may know, when the JCM2000 Dual Super Lead series of amps was first introduced in 1997, we were delighted to see them get a fantastic reaction from guitar players and also the press. In fact one of the biggest American guitar magazines described the DSL100 as “The Best Marshall ever? It combines the best tonal qualities and features of both modern and vintage Marshall amps in one package.” Better still, when the world renowned magazine, Guitar Player, reviewed the DSL100 it printed “The Ultimate Marshall?” as a subheading on their June 1997 cover.

After a very successful life, the JCM2000 series was replaced by the JVM series in 2007, which has also gone onto great success and critical acclaim. That said, there is still a great deal of respect and demand for the DSL’s with one of the UK’s most popular guitar magazines recently referring to the DSL100 as “the go-to rock amp.”

As a result of public demand, I have decided to introduce four affordable amplifiers based on the popular DSL100, two of which are featured in this manual: a 100-Watt head – the DSL100H, and a 40-Watt combo – the DSL40C. In addition to their new names, these EL34 powered beauties both boast the same exact front panel features and functions. They also include a variable Resonance and Presence. Resonance adds a variable bass boost to these EL34 powered beauties both boast the same exact front panel features and functions. They also include a variable Resonance and Presence. Resonance adds a variable bass boost to these.

Both amps feature two footswitchable channels (footswitch supplied) named Classic Gain and Ultra Gain – each with two modes, selectable via a front-panel button. As their names imply, each channel has a very different character. Classic Gain takes you from a 1959 style clean to the snarl of a JCM800 2203, and everything in-between, via its Clean Crunch mode button. Ultra Gain, on the other hand, takes you from an even modified 2203 vibe to an even higher gain response with additional mid-boost, via its Lead 1/Lead 2, mode switch.

Both channels share a passive three-band EQ with controls for Bass, Middle and Treble. The Equalisation section also features a Tone Shift button which, when activated (pushed in), shifts out the mid frequencies making the amp ideal for brutal, modern metal tones, especially when combined with high gain settings. Each channel also has its own individual Reverb level control for the built-in studio quality digital spring reverbs. This effect can be switched on/off via the supplied footswitch.

Both amps’ power section features controls for Resonance and Presence. Resonance adds a variable bass boost to your sound without muffling it up, while the Presence adds high end. The ability to select either full output power or half-power via the Pentode/Triode switch on the rear panel, adds further to your DSL’s already impressive feature set. The all-round tonal and gain versatility makes both the DSL100H & DSL40C superb and flexible performance tools for today’s most demanding playing situations and you can rest assured it is packed full of our famed Marshall tone.

The ability to select either full output power or half-power via the Pentode/Triode switch on the rear panel, adds further to your DSL’s already impressive feature set.

Enjoy your DSL amp and please read this handbook carefully before plugging in.

Follow all instructions and heed all warnings

KEEP THESE INSTRUCTIONS

Warning:
Before going any further, make sure that your amplifier is compatible with your electrical supply. If you have any doubt, please seek help from a qualified technician – your Marshall dealer can help you in this respect.

Mains Input & Fuse:
Your amplifier is provided with either a detachable mains (power) lead which should be connected to the mains input socket on the rear panel of the amplifier or a fixed mains (power) lead attached to the rear of the amplifier.

The specific mains input voltage rating that your amplifier has been manufactured for is indicated on the rear panel of the amplifier.

The correct value and type of mains fuse for valve amplifiers is specified on the rear panel of the amplifier.

Transporting your equipment:
Please ensure that your amplifier is switched off and unplugged from the mains electricity supply and that all removable cables have been disconnected from your equipment before attempting to move it.

Important set up information:
1. Make sure that the cabinet(s) /speakers, where appropriate, are connected to the correct impedance LOUDSPEAKER jack(s) on the rear panel of the amplifier. See the Speaker Output guides in this handbook, if applicable, for specific information regarding impedance matching. When using an extension cabinet make sure that you are using a proper speaker cable. Never use a screened (shielded) guitar cable for this purpose.

2. Before going any further, make sure that your amplifier is compatible with your electrical supply. If you have any doubt, please seek help from a qualified technician – your Marshall dealer can help you in this respect.

3. For amplifiers provided with a detachable mains (power) lead, connect the supplied mains (power) lead to the MAINS INPUT on the rear panel and then into an electrical outlet.

4. Plug your guitar into the INPUT jack socket on the front panel.

5. Turn the volume control to zero (this is usually located on the rear panel or a fixed mains (power) lead attached to the rear of the amplifier.

6. After waiting engage the STANDBY switch (see Front Panel Features for full explanation).

7. Turn the volume up to your preferred level and your amp is ready to play.

EUROPE ONLY – Note: This equipment has been tested and found to comply with the requirements of the EMC Directive (Environments E1, E2, and E3 EN 55103-2/3) and the Low Voltage Directive in the E.U.

EUROPE ONLY – Note: The Peak Inrush current for the DSL100H is 44A and the DSL40C is 27A.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following means:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.
1. **INPUT**
   - Input jack socket for guitar cable.

2. **CLASSIC GAIN CHANNEL**
   - This channel features two modes – Clean and Crunch. The button pressed in, the Clean mode is reminiscent of an early 1959 Plexi Super Lead head and, depending on the Gain setting (2), will take you from clean to a Plexi style crunch.

3. **CLEAN/CRUNCH MODE SELECT BUTTON**
   - Selects Ultra Gain channel when pushed in, and the Crunch channel when pushed out.

4. **CLASSIC GAIN VOLUME**
   - Controls the volume level for the Classic Gain channel.

5. **CLASSIC GAIN LEVEL**
   - Controls the gain level for the Classic Gain channel.

6. **CLASSIC GAIN LED**
   - This LED lights-up green to indicate that the Classic Gain channel has been selected.

7. **CHANNEL GAIN SELECTION BUTTON**
   - This LED lights-up red to indicate that the Ultra Gain channel has been selected.

8. **CHANNEL GAIN CONTROL**
   - Controls the volume level for the Classic Gain channel.

9. **LEAD 1/LEAD 2 BUTTON**
   - Selects Ultra Gain channel when pushed in, and the Classic Gain channel when out.

10. **ULTRA GAIN CHANNEL**
    - This channel features two selectable modes – Lead 1 (button out) gives an open, high-gain crunch, with traditional Marshall characteristics, similar to a hot-rodded JCM800: 2203 style grind.

11. **MIDDLE CONTROL**
    - This controls the middle register of your guitar’s sound. Turning this up will make your guitar sound fatter, while turning it down will result in a sharper, “scopped” tone – especially when used in conjunction with the Tone Shift button.

12. **TONE SHIFT**
    - The Tone Shift reconfigures the tone network adding a new dimension to passive tone shaping. When the button is pressed in and the Middle control (12) is turned down, the result is an aggressive, scopped-mid sound, ideal for many modern metal styles.

13. **PRESENCE CONTROL**
    - Controls the amount of gain increases, so will the distortion level in your sound.

14. **RESONANCE CONTROL**
    - Controls the Reverb level on the Classic Gain channel.

15. **POWER SWITCH**
    - On/Off switch for mains power to the amplifier.

16. **FX LOOP SWITCH**
    - This switches the DSL40C’s Series FX loop on/off.

17. **FX LOOP SEND**
    - For connection to the input of an external effects pedal or processor.

18. **FX LOOP RETURN**
    - For connection from the output of an external effects pedal or processor.

19. **FX LOOP**
    - This switches the DSL40C’s Series FX loop on or off.

20. **POWER**
    - For the connection of the supplied 2 button footswitch (PEDL-00009). This allows you to switch between the Classic Gain and Ultra Gain channels (Note: The footswitch overrides the front panel Channel switch) and also switches the Reverb on/off.

21. **LOUDSPEAKER OUTPUTS**
   - IMPORTANT OPERATIONAL NOTE: When all-valve amplifiers it is imperative that the amp is connected to a load whilst in operation and that the impedance output(s) on the amp matches the total impedance of the speaker cabinet(s) being used.

22. **FUSE**
    - Fuses 4 x ECC83: 2 x EL34. Failure to comply with these points will result in damage to the amplifier.

23. **DIMENSIONS**
    - W: 621
    - H: 490
    - D: 252

Specifications:

**DSL40C**

- **Power (RMS)**: 40W
- **Valves**: 4 x ECC83, 2 x EL34
- **Channels**: 2
- **Speaker**: 1 x 12”
- **Weight (kg)**: 22.85
- **Dimensions (mm)**: W 621, H 490, D 252

For the connection of a 16Ω speaker cabinet. It should be noted that this speaker cabinet must not be run into an impedance less than 8Ω.

8. **& 9. 8Ω SPEAKER OUTPUTS**
   - For use when the total impedance of the speaker cabinet(s) being used is 8Ω.
### DSL100H Front Panel Controls & Switches (from Left to Right)

**Power Section**
1. **Power Switch**
   - On/Off switch for mains power to the amplifier.

2. **Standby Switch**
   - Controls H.T. or high voltage to the valves, allowing them to attain correct working temperature before playing.

**Note 1:** To prolong the life of the valves it is always advisable to switch on the Mains Power Switch (1) about 2 minutes before switching on the Standby Switch (2).

**Note 2:** On powering your amp down, the Standby should always be switched off before the Power Switch is.

**Note 3:** The standby facility is particularly useful before playing, when changing guitars and between sets as it allows you to keep the valves operating at a functional temperature without any sound being produced.

**Reverb Section**
3. **Ultra Gain Channel Reverb Control**
   - Controls the Reverb level on the Ultra Gain channel.

4. **Classic Gain Channel Reverb Control**
   - Controls the Reverb level on the Classic Gain channel.

**Equalisation Section**
5. **Resonance Control**
   - Turning this control clockwise adds a resonant bass boost to your sound, increasing bottom end that whilst making your tone fatter around that all-important low end. This is a function of the powerstage.

6. **Presence Control**
   - Turning this control clockwise adds higher frequencies to your guitar tone, creating crispness and bite and making the sound more cutting and in your face. This is also a function of the powerstage.

7. **Tone Shift Button**
   - The Tone Shift reconfigures the tone network to give a new dimension to passive tone shaping. When the button is pushed in, and the Middle control (9) is turned down, the result is an aggressive, scooped-mid sound, ideal for many modern metal styles.

8. **Bass Control**
   - Controls the amount of bottom end (low frequencies) in your tone.

9. **Middle Control**
   - This dictates the middle register of your guitar’s sound. Turning this up will make your guitar sound fatter, while turning it down will result in a sharper, “scooped” tone – especially when used in conjunction with the Tone Shift button.

10. **Treble Control**
    - Controls the high frequencies of the guitar tone, making your guitar sound brighter when it is turned clockwise.

**Ultra Gain Channel**
11. **Ultra Gain Channel Volume Control**
    - Controls the volume level for the Ultra Gain channel.

12. **Lead 1/Lead 2 Button**
    - The Ultra channel features two selectable modes – Lead 1 & Lead 2. Lead 1 (button out) gives an open, high-gain crunch, with traditional Marshall characteristics, similar to a hot-rodded JCM800 2203. Lead 2 (button in) produces a mid-boasted tone with even higher gain possibilities.

13. **Ultra Gain Channel Gain Control**
    - Controls the Gain level for the Ultra Gain channel. As the amount of gain increases, so will the distortion level in your sound.

14. **Ultra Gain Channel LED**
    - This LED lights-up red to indicate that the Ultra Gain channel has been selected.

15. **Channel Selection Button**
    - Selects the Ultra Gain channel when pushed in, and the Classic Gain channel when out.

**Classic Gain Channel**
16. **Classic Gain Channel LED**
    - This LED lights-up green to indicate that the Classic Gain channel has been selected.

17. **Classic Gain Channel Volume Control**
    - Controls the volume level for the Classic Gain channel.

18. **Clean/Crunch Button**
    - Just like the Ultra Gain channel, the Classic Gain channel features two modes – Clean and Crunch. The Clean mode is reminiscent of an early 1959 Plexi Super Lead head and, depending on the Gain setting (19) will take you from clean to a Plexi style crunch. The Crunch mode gives you a JCM800 2203 style grind.

19. **Classic Gain Channel Gain Control**
    - Controls the gain level for the Classic Gain channel. As the amount of gain increases, so will the distortion level in your sound.

20. **Input**
    - Input jack socket for guitar cable.

### DSL100H Rear Panel Features (from Left to Right)

**Power Section**
5. **FX Loop**
   - This switches the DSL100H’s Series FX loop on or off.

6. **FX Loop Return**
   - For connection from the output of an external effects pedal or processor.

7. **FX Loop Send**
   - For connection to the input of an external effects pedal or processor.

**Output Power Selection**
8. **Pentode/Triode Switch**
   - When Pentode (full power) is selected the amp’s output capability is the full 100-Watts. When Triode mode (half power) is selected, the amp’s output is halved to 50-Watts. Triode mode also produces a smoother, less aggressive sound.

**Important Operational Note:** When this switch is used the amp must always be in Standby mode.

**Mains Input Socket with Mains Fuse**
9. **Main Input Socket with Mains Fuse**
   - Your amp is provided with a detachable mains (power) lead, which is connected here. The specific mains input voltage rating that your amplifier has been manufactured for is indicated on the rear panel. Before connecting for the first time, please ensure that your amplifier is compatible with your electricity supply. If you have any doubt, please seek advice from a qualified technician. Your Marshall dealer will help you in this respect.

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**Technical Specification**

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<th>Power (RMS)</th>
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**Dimensions (mm)**

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<tr>
<td>LOUDSPEAKER OUTPUTS</td>
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| IMPORTANT OPERATIONAL NOTE: With all-valve amplifiers it is imperative that the amp is connected to a load whilst in operation and that the impedance output(s) on the amp matches the total impedance of the speaker cabinet(s) being used. Failure to comply with these points will result in damage to the amplifier. The DSL100H features three outputs, a dedicated 16Ω output and two 8Ω outputs. The DSL100H must not be run into an impedance less than 8Ω.

1. & 2. 8Ω Speaker Outputs
   - For use when the total impedance of the speaker cabinet(s) being used is 8Ω. That is, when using either single 8Ω cab or two 16Ω cabs.

3. 16Ω Speaker Output
   - For the connection of a 16Ω speaker cabinet. It should be noted that when this Speaker Output is in use the remaining Speaker Outputs, items 1 and 2, are not operational.

**Footswitch**
4. Footswitch Jack
   - For the connection of the supplied 2 button footswitch (PEDL-00009). This allows you to switch between the Classic Gain and Ultra Gain channels and also switches the Reverb on/off.

**Note:** The footswitch overrides the front panel Channel switch.